



FORSYTH CENTRAL HIGH SCHOOL

131 Almon C. Hill Dr, Cumming, GA 30040
770-887-8151 | www.forsyth.k12.ga.us/fchs

For more education on each pathway, download a complete Program of Study: <https://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/Programs-of-Study.aspx>

CLUSTER	PATHWAY	DETAIL	COURSE 1	COURSE 2	COURSE 3	COURSE 4	CAREER CHOICES	
STEM CLUSTER	Engineering and Technology Pathway	The major focus of the Introduction to Engineering Design (IED) course is to expose students to design process, research and analysis, teamwork, communication methods, global and human impacts, engineering standards, and technical documentation. It allows students to develop strategies to enable and direct their own learning.	Foundations of Engineering and Technology	Engineering Concepts	Engineering Applications	Internship Forsyth	• Civil Engineer • Drafter • Electrical Engineer • Industrial Engineer	• Machinist • Manufacturing • Materials/Mechanical Engineer • Quality Control Inspector
AGRICULTURE CLUSTER	Veterinary Science Pathway	This pathway covers the basics of animal care. Topics covered include disease, parasites, feeding, shelter, grooming, and general animal care. Courses allow students entering the workforce after graduating high school to develop entry-level skills to become employed and to continue their education on the job.	Basic Agriculture Science	Animal Science and Biotechnology	Veterinary Science	Internship Forsyth	• Animal Physical Therapist • Animal Welfare Specialist • Cell Culture Specialist • Companion Animal Breeder	• Dairy Unit Herdsman/Manager • Embryo Transfer Technician • Veterinarian • Veterinary Technician
ARTS, ENTERTAINMENT AND DESIGN CLUSTER	Audio/Video Technology and Film Pathway	This pathway teaches all aspects of video production from pre-production, production, and post-production, including theory and practical application. Students will have the opportunity to participate in various types of broadcast/video production from events and commercials to mini-movies and documentaries.	Audio and Video Technology and Film I	Audio and Video Technology and Film II	Audio and Video Technology and Film III	Internship Forsyth	• A/V Equipment Technician • Broadcast News Analyst • Broadcast Technician • Camera Operator	• Control Room Technician • Journalist/Editor/Reporter • Sound Technician • Station Manager
	Film Production Pathway	The pathway will prepare students to participate in multiple class-created film production team simulations and film projects to develop a professional film portfolio. Topics covered may include terminology, safety on a set, production teams, equipment, script writing, production, editing, post-production, and professional ethics.	Audio and Video Technology and Film	Introduction to Film Production	Film Production Applications	Internship Forsyth	• Broadcast Technician • Camera Operators • Grip • Lighting Technician	• Photographer • Reporter • Script Supervisor • Set and Exhibit Designer
DIGITAL TECHNOLOGY CLUSTER	Computer Science Pathway	Careers in Computer Science lead individuals to create, modify, and test codes - all while inventing and designing new approaches to computing technology and finding innovative uses for existing technology. Career area focus requires solving complex problems in computing for business, medicine, science, and other fields.	Introduction to Software Technology	Computer Science Principles or AP Computer Science Principles	AP Computer Science A	Internship Forsyth	• Computer Programmers • Computer Hardware Engineers • Computer Network Architects • Computer System Analysts	• Database Administrators • Information Security Analysts • Software Developers • Software Testers
	Programming Pathway	The Programming pathway gives many opportunities to strengthen problem solving skills, and provides needed skills in all disciplines.	Introduction to Software Technology	Computer Science Principles or AP Computer Science Principles	Programming, Apps, Games and Society	Internship Forsyth	• Actuary • Computer Programmer • Computer Scientist • Computer Systems Analyst	• Computer Software Engineer • Database Administrator • Game Artist • Software Developer
EDUCATION CLUSTER	Education as a Profession Pathway	Educational services is the second largest industry. This includes education institutions from elementary schools to universities. The overall demand for educational services will increase as growing emphasis on improving education along with retirements will create large numbers of job openings.	Education as a Profession I	Education as a Profession II	Education as a Profession Practicum	Internship Forsyth	• Adult Educator • After-School Supervisor • Educational and Teacher Aide • K-12 School Teacher	• Media Specialist • Post-Secondary Vocational • School Administration • Special Education Teacher
HEALTHCARE AND HUMAN SERVICES CLUSTER	Biotechnology Research and Development Pathway	This pathway provides an understanding of topics such as physiology, genetics, microbiology and public health. Areas of instruction include an understanding of the processes, structures and interactions of the human body, as well as the prevention, diagnosis and treatment of disease.	Introduction to Healthcare Science	Essentials of Biotechnology	Applications of Biotechnology	Internship Forsyth	• Biological or Medical Illustrator • Crime Lab Technician • Laboratory Technician • Licensed Practical Nurse	• Medical Writer • Mortician • Radiology Technician • Surgical Technician
	Cosmetology Pathway	All participating students are required by the Georgia State Board of Cosmetology to obtain a total of 1500 unit hours to be eligible for both the written and practical state test. Students benefit from the program because it allows the student the opportunity to obtain at least half of the required state board hours.	Introduction to Personal Care Services	Cosmetology Services II	Cosmetology Services III	Internship Forsyth	• Barber Stylist • Color Specialist Chemist • Cosmetologist • Make-up Artist	• Nail Technician • Salon Owner • Shampoo Tech • Wig Stylist
	Nutrition and Food Science Pathway	Employment in this field is expected to grow faster as a result of the increasing emphasis on disease prevention through improved dietary habits. A growing and aging population will increase the demand for meals and nutritional counseling agencies in hospitals, residential care facilities, schools, prisons, community health programs, and home health care.	Food, Nutrition, and Wellness	Food for Life	Food Science	Internship Forsyth	• Chef and Head Cook • Dietitian/Nutritionist • Food Inspector • Food Services Manager	• Geriatric Food Designer • Health Educator • Health Inspector • Nutritionist
HOSPITALITY, EVENTS AND TOURISM CLUSTER	Sports and Entertainment Marketing Pathway	Students will master the industry's terminology, market arenas and venues, obtain sponsorships, maintain solid media relations, coordinate and manage campaigns and events, etc. Students have the opportunity to take the MBA Research "A*S*K Marketing Concepts" or the NOCTI "Marketing Education Manager Trainee".	Marketing Principles	Introduction to Sports and Entertainment Marketing	Advanced Sports and Entertainment Marketing	Internship Forsyth	• Event Coordinator • Market Research Promoter • Public Relations Salesperson • Social Media Manager	• Sports Agent • Sports Manager • Sports Marketing Professional • Sports Writer
MARKETING AND SALES CLUSTER	Marketing and Management Pathway	Students develop knowledge and skills of marketing (economics, human relations and business basics) and the functional areas of marketing (product and service planning, management, purchasing and pricing, selling and promotion, risk management, financing and distribution), as well as international marketing, management and entrepreneurship.	Marketing Principles	Marketing and Entrepreneurship	Marketing Management	Internship Forsyth	• Advertising Account Executive • Communications Specialist • Customer Service • Entertainment Marketer	• Insurance Agent • Marketing Specialist • Media Buyer • Public Relations Specialist
	Marketing Communications and Promotions Pathway	Marketing jobs are found in almost every industry. College graduates with related experience, a high level of creativity and strong communication skills will have the best job opportunities. Technology is changing the way we communicate and promote goods and services with potential customers.	Marketing Principles	Promotional and Digital Marketing	Integrated Marketing Communications	Internship Forsyth	• Advertising/Promotions • Brand Ambassador • Green Marketer • Market Research Analyst	• Marketing Manager • Marketing Strategist • Public Relations Specialist • Sales Managers/Representative
SUPPLY CHAIN AND LOGISTICS CLUSTER	Automotive Technology Pathway	Employers are now hiring employees with good people skills and backgrounds in electronics, computers and communications, along with math and problem-solving skills. This program will teach "head skills" and "hand skills" to prepare the student for the world of automotive technology careers and to meet the needs of prospective employers.	General Automotive Technology 1, 2 and 3	Advanced Automotive Technology 4, 5 and 6	Automotive Service Technology Internship 1, 2 and 3	Internship Forsyth	• Auto Manufacturer Sales or Service • Auto or Body Technician • Automotive Engineer/Mechanist • Dealership or Shop Owner	• Parts Professional • Quality Control Technician • Service Advisor • Technician (ASE Certified)